Appl. No. 10/044,687
Amdt. dated October 19, 2004
Reply to Office Action of July 27, 2004

Amendments to the Specification:

Please replace the paragraph beginning at page 3, line 10, with the following rewritten

paragraph:

Further details of an ESL system suitable for use in conjunction with the present

invention are found in U.S. Patent Application Serial No. [[_____]] 10/044,021

filed January 11, 20012 entitled "Methods and Apparatus for Performing Delta Updates of an

Electronic Shelf Label", U.S. Patent Application Serial No. [[_____]] 10/044,610

filed January 11, 20012 entitled "Methods and Apparatus for Intelligent Data Bedcheck of an

Electronic Shelf Label", U.S. Patent Application Serial No.[[_____]] 10/044,020

filed January 11, 20012 entitled "Methods and Apparatus for Reduced Electronic Shelf Label

Power Consumption", U.S. Patent Application Serial No. [[_____]] 10/044,535

filed January 11, 20012 entitled "Methods and Apparatus for Error Detection and Correction of

an Electronic Shelf Label System Communication Error", U.S. Patent Application Serial

No. [[_____]] 10/044,439 filed January 11, 20012 entitled "Methods and

Apparatus for Automatically Locating an Electronic Shelf Label", U.S. Patent Application Serial

No. [[_____]] 10/044,440 filed January 11, 20012 entitled "Methods and

Apparatus for Conserving Battery Power in an Electronic Shelf Label System", U.S. Patent

Application Serial No. [[_____]] 10/044,668 filed January 11, 20012 entitled

"Methods and Apparatus for Automatic Assignment of a Communication Base Station and

Timeslot for an Electronic Shelf Label", all of which are assigned to the assignee of the present

invention and incorporated by reference herein in their entirety.

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Appl. No. 10/044,687
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Please replace the paragraph beginning at page 8, line 20, with the following rewritten

paragraph:

Fig. 3 shows a method 300 of automatically detecting and correcting data errors in an

ESL's registers or memory in accordance with the present invention. In step 302, a computer

system, such as host computer system 102, calculates sumchecks of the register data contained in

a data file, such as ESL data file 109, for the ESL. In a preferred embodiment, one sumcheck is

calculated for each ESL register. In step 304, the computer system transmits a bedcheck message

to the ESL including one of the calculated sumchecks. In step 306, the ESL receives the

bedcheck message and the ESL's circuitry calculates a sumcheck using the data actually

contained in one of the ESL's registers. In step 307, the sumchecks are compared locally within

the ESL. If the received sumcheck matches the calculated sumcheck, the method continues to

step 308. If the received sumcheck does not match the calculated sumcheck, the method

continues to step 310. If the ESL does not respond to the bedcheck message, the method

continues to step 322. In step 322, the computer system attempts to find the ESL ~~to find the~~

~~ESL~~. If the ESL is found, the ESL is assigned to a new timeslot and/or CBS and the method

returns to step 302.

Please replace the paragraph beginning at page 9, line 16, with the following rewritten

paragraph:

Returning to step 310, ~~in step 310~~ the ESL 122 responds to the data bedcheck message by

transmitting a negative acknowledgement message (NACK). In step 314, the computer system

receives the NACK and an error count in a database is incremented to reflect the initial bedcheck

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failure. In step 316, the computer system transmits to the ESL a series of messages which cause

all of the registers in the ESL to be updated with the register data contained in the ESL data file.

In step 318, another bedcheck is performed to verify the contents of the ESL registers. If, after

multiple bedchecks are performed, the error count associated with the ESL reaches a

predetermined count, then an error message may be generated, informing a system operator of a

problem associated with the ESL.

Please replace the Abstract beginning at page 14, line 2, with the following rewritten

abstract:

An electronic ~~price~~ shelf label (ESL) system with register corrections is described. ~~In one aspect, an ESL displays information relating to an item associated with the ESL. The~~An ESL

includes a plurality of registers for storing information controlling the content and formatting of

~~the~~ information ~~displayed~~. A host computer system includes an ESL data file comprising a data

image of the ESL's registers. The host computer calculates one or more sumchecks of the data

image, and transmits one or more bedcheck messages including the sumchecks to the ESL. The

ESL receives each bedcheck message and compares each received sumcheck with a sumcheck

calculated using the information stored in the ESL's registers. If the received sumcheck matches

the calculated sumcheck ~~calculated using the information stored in the plurality of registers~~, the

ESL transmits a positive acknowledgement message to the host computer. ~~If the received sumcheck does not match the sumcheck calculated using the information stored in the plurality of registers~~ Otherwise, the ESL transmits a negative acknowledgment message to the host

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computer, and tThe host computer then transmits a series of messages to the ESL updating the

plurality of registers with the data image contained in the ESL data file.

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